AMENDMENTS TO THE CLAIMS:

Please amend the claims as follows, substituting any amended claim(s) for the corresponding pending claim(s):

1. (Currently Amended) A router for interconnecting external devices coupled to said router, said router comprising:

a switch fabric; and

a plurality of routing nodes coupled to said switch fabric, wherein each of said plurality of routing nodes comprises packet processing circuitry capable of transmitting data packets to, and receiving data packets from, said external devices and further capable of transmitting data packets to, and receiving data packets from, other ones of said plurality of routing nodes via said switch fabric,

wherein said switch fabric is capable of detecting that the output bandwidth of a first output of said switch fabric has been exceeded and, in response to said detection, said switch fabric uses a credit-based system to cause [[s]] a first one of said plurality of routing nodes to slow an input rate of data packets transmitted from said first routing node to a first input of said switch fabric, said first routing node comprising a first queue, wherein the first queue loses credit when a size of the first queue exceeds an upper threshold and the first queue gains credit when the size of the first queue falls below a lower threshold, said data packets having a plurality of priority levels.

2. (Original) The router as set forth in Claim 1 wherein said switch fabric implements a Weighted Fair Queuing algorithm to slow said input rate of data packets from said first routing node.

3. (Currently Amended) The router as set forth in Claim 1 wherein said ~~first routing node comprises a~~ first queue of the first routing node ~~comprising~~ comprises a plurality of prioritized buffers capable of storing data packets to be transmitted to said switch fabric.

4. (Original) The router as set forth in Claim 3 wherein said first routing node slows down a rate at which data packets are transmitted to said switch fabric from said first queue.

5. (Original) The router as set forth in Claim 4 wherein said first routing node selects data packets to be transferred to said switch fabric from a first one of said plurality of prioritized buffers according to a priority value associated with said first prioritized buffer.

6. (Original) The router as set forth in Claim 5 wherein said first routing node causes a first one of said external devices to slow a rate at which data packets are transmitted to said first queue.

7. (Original) The router as set forth in Claim 3 wherein said first routing node routes said data packets using Layer 3 routing information.

8. (Original) The router as set forth in Claim 7 wherein said Layer 3 routing information comprises an Internet protocol (IP) address.

9. (Original) The router as set forth in Claim 3 wherein said first routing node routes said data packets using Layer 2 medium access control (MAC) address information.

10. (Currently Amended) A communication network comprising a plurality of routers that communicate data packets to one another and to interfacing external devices, each of said plurality of routers comprising:

a switch fabric; and

a plurality of routing nodes coupled to said switch fabric, wherein each of said plurality of routing nodes comprises packet processing circuitry capable of transmitting data packets to, and receiving data packets from, said external devices and further capable of transmitting data packets to, and receiving data packets from, other ones of said plurality of routing nodes via said switch fabric,

wherein said switch fabric is capable of detecting that the output bandwidth of a first output of said switch fabric has been exceeded and, in response to said detection, said switch fabric uses a credit-based system to cause [[s]] a first one of said plurality of routing nodes to slow an input rate of data packets transmitted from said first routing node to a first input of said switch fabric, said first routing node comprising a first queue, wherein the first queue loses credit when a size of the first queue exceeds an upper threshold and the first queue gains credit when the size of the first queue falls below a lower threshold, said data packets having a plurality of priority levels.

11. (Original) The communication network as set forth in Claim 10 wherein said switch fabric implements a Weighted Fair Queuing algorithm to slow said input rate of data packets from said first routing node.

12. (Currently Amended) The communication network as set forth in Claim 10 wherein said ~~first routing node comprises a~~ first queue of the first routing node ~~comprising~~ comprises a plurality of prioritized buffers capable of storing data packets to be transmitted to said switch fabric.

13. (Original) The communication network as set forth in Claim 12 wherein said first routing node slows down a rate at which data packets are transmitted to said switch fabric from said first queue.

14. (Original) The communication network as set forth in Claim 13 wherein said first routing node selects data packets to be transferred to said switch fabric from a first one of said plurality of prioritized buffers according to a priority value associated with said first prioritized buffer.

15. (Original) The communication network as set forth in Claim 14 wherein said first routing node causes a first one of said external devices to slow a rate at which data packets are transmitted to said first queue.

16. (Original) The communication network as set forth in Claim 12 wherein said first routing node routes said data packets using Layer 3 routing information.

17. (Original) The communication network as set forth in Claim 16 wherein said Layer 3 routing information comprises an Internet protocol (IP) address.

18. (Original) The communication network as set forth in Claim 12 wherein said first routing node routes said data packets using Layer 2 medium access control (MAC) address information.

19. (Currently Amended) For use in a router comprising a switch fabric and a plurality of routing nodes, each of the routing nodes comprising packet processing circuitry for transmitting data packets to, and receiving data packets from, external devices and other routing nodes via the switch fabric, a method of routing data packets comprising the steps of:

in the switch fabric, detecting that the output bandwidth of a first output of the switch fabric has been exceeded; and

in response to the detection, ~~causing~~ using a credit-based system to cause a first routing node to slow an input rate of data packets transmitted from the first routing node to a first input of the switch fabric, said first routing node comprising a first queue, wherein the first queue loses credit when a size of the first queue exceeds an upper threshold and the first queue gains credit when the size of the first queue falls below a lower threshold, said data packets having a plurality of priority levels.

20. (Original) The method as set forth in Claim 19 wherein the switch fabric implements a Weighted Fair Queuing algorithm to slow the input rate of data packets from the first routing node.

21. (Currently Amended) The method as set forth in Claim 19 wherein the ~~first routing node comprises a~~ first queue of the first routing node ~~comprising~~ comprises a plurality of prioritized buffers capable of storing data packets to be transmitted to the switch fabric.

22. (Original) The method as set forth in Claim 21 further comprising the step of selecting data packets to be transferred to the switch fabric from a first one of the plurality of prioritized buffers according to a priority value associated with the first prioritized buffer.

23. (Previously Presented) The method as set forth in Claim 22 further comprising the step of causing the first external device to slow a rate at which data packets are transmitted to the first queue.